PERIODICALS

American Journal of Physical Anthropology

July-September 1933, Vol. XVIII, No. 1.—H. J. Coolidge Jr. discusses a specimen of the chimpanzee from the left bank of the Congo, within the great bend of the river. He thinks it very distinct from other races of chimpanzee and proposes the name *Pan paniscus*. This paper is followed by one from A. H. Schultz which compares chimpanzee foetuses, and one by G. B. Wislocki on placentation in the chimpanzee.

A. Hrdlička discusses the Eskimo of the Lower Kuskokwim river, Alaska. The river empties itself into the Kuskokwim Bight and Bering Sea south of the Yukon. The author emphasizes the round-headedness of these people, the average cephalic index for 174 males being 80·31, but he thinks there are two strains, one round and the other more longheaded. Both, however, belong to the south-western and mid-western Eskimo stocks in quite typical fashion. The article is well illustrated.

H. J. FLEURE.

Biometrika

May 1933, Vol. XXV, Parts 1 and 2.—*Plural Births, with a New Pedigree.* By Julia Bell.—The occurrence of plural births in human families has sometimes been a source of superstition, often an occasion for laughter and always a matter of interest. Recently a great deal of solid scientific work has been devoted to the study of twin resemblances and of the distribution of multiple births in families, and the bibliography of the subject is reaching considerable proportions. It is refreshing to find in the pages of *Biometrika* a paper by Dr. Julia Bell written in a somewhat lighter vein and containing a collection of curious histories and pedigrees of plural births.

The stimulus which led Dr. Bell to look into this subject to such good purpose was a pedigree which she obtained by inquiry from a patient of Dr. E. A. Barton. This is of unusual interest in that it shows the result of a marriage between individuals, each of whom had siblings belonging to multiple births, the wife being a sister of quadruplets and the husband having as siblings two pairs of twins and probably also one set of triplets. They had fifteen children consisting of triplets, two pairs of twins and eight at single births. Three pairs of twins were born in the next generation. The father of two of these pairs had been born at a single birth, and though of like sex these twins were in each instance said to be very unlike in physical characters.

A German pedigree recorded by Peiper in 1923 is also reproduced, in which a woman had by her first husband, who himself had a twin sister, nine pairs of twins all of unlike sex, and by her second husband six single births. Both these pedigrees appear to illustrate inheritance of a tendency to twinning of the dizygotic type through the male, the father in one case being a dizygotic twin, and in the other case a brother of twins.

It has been thought that only the tendency to twinning of monozygotic type can be transmitted through the male, although both types seem to be transmitted through the female, but the evidence is conflicting. A few exceptional pedigrees cannot prove that transmission of the dizygotic tendency through the father occurs, for the tendency may have been also present in the mother's family, though it has not shown itself elsewhere in the pedigree. The birth of twins is so frequent an event that the matter can only be settled by statistical analysis of many families, and even when this is done caution is necessary as to the manner in which they have been selected.

Other unusual pedigrees illustrative of apparent transmission of the liability to multiple births through the female are discussed, in one of which there were fifteen children including quadruplets, triplets and two pairs of twins. Some remarkable cases of successive plural births are also recounted from the literature of the subject, ranging from Aristotle's reference to a woman who gave birth to a sequence of four quintuplets to the famous case of the Russian peasant who, by two wives, was alleged to have had 87 children at 35 births. Verification cannot be obtained for the more remarkable of these records, but many instances of successive twin births up to the number of nine, and of three successive triplets are authentic. The oft-quoted sixteenth-century Dunstable inscription which has been thought to attribute three triplets and two quintuplets to a woman buried in the church there, comes under the expert criticism of Professor Butler, who throws doubt upon the necessity for regarding "*Ter tres bis quinos*" in the epitaph as anything more than a poetical expression for nineteen.

No less interesting are the extracts from the literature relating to the maximum number of children at a birth. As many as twelve have been recorded, but Dr. Bell concludes that "seven at a birth is the greatest number of which we have an authentic account, but we have no reason to believe that this number has never been exceeded."

The paper does not seek to prove any thesis, but this in no way detracts from its interest.

PERCY STOCKS.

British Medical Journal

November 18th, 1933.—*Fœtal Malformations.*—Mr. P. W. Malpas in a series of 13,964 deliveries found that there were 294 fœtal malformations, or 2·11 per cent. In anencephalus, hydrocephalus, hare-lip and cleft palate, mongolism, and con-

genital heart disease, the incidence of the malformations showed a steady increase with the age of the mother, while in spina bifida, talipes, and hypospadias there was no variation with the mother's age. The incidence of anencephalus, hydrocephalus, hare-lip and cleft palate, mongolism, and heart disease was found to increase with increasing parity, while club-foot, hypospadias, and spina bifida showed no such relationship with parity, with the possible exception of hypospadias, which showed an unusually high incidence in primiparæ—75 per cent. Where the ages of the fathers had also been secured no marked discrepancy between the ages of the two parents was noted. In none of the 104 cases in which consanguity had been enquired into had it been found. In the series there was only one instance of malformation with known hereditary basis—a case of web-toes. There were eleven instances of previous malformations occurring in the children born to the parents of the malformed fœtus. The frequency with which a given malformation is followed by another type of malformation appears to show that most of the malformations dealt with cannot be due to the action of specific groups of genetic factors, and reinforces the view that they are mostly attributable to the interplay of environmental factors. Among the mothers there was a definite evidence of poor physique, and an unduly high percentage of feeble-mindedness or a low standard of living. The lecturer concluded that some malformations were of genetic origin, but the greater number were either caused by, or conditioned by, maternal environmental factors, and the chief among these were age and parity of the mothers.

A. A. E. NEWTH.

Character and Personality

June 1933, Vol. I, No. 4.—*The Handwriting of Identical Twins Reared Apart.* By E. Seeman and R. Saudek.—One of the most fruitful approaches to the determination of hereditary and acquired characters is the study of pairs of monozygotic twins who have been brought up in different environments. So far only thirteen such pairs have been traced. With the aid of graphological methods the authors describe the characteristics of two of these pairs, showing that, in spite of many striking similarities, their personalities have diverged considerably. Further similar studies will appear in this Journal before the main theoretical conclusions are presented.

The Delimitation of Influences of Environment and Heredity on Mental Disposition. By M. Bleuler.—This article should be of great interest to eugenists. The author shows that modern sociological, political, legal and economic practice would be aided by an exact knowledge of the influence of heredity on mental properties. The difficulties of applying simple Mendelian formulæ to complex mental traits are discussed. The lack of conclusive evidence as to the degree to which intelligence is inherited may be due to the somewhat artificial distinction which has been drawn between purely intellectual and purely emotional qualities of personality. As an example of scientific investigation in this field the author describes his work with the Rorschach inkblot test, which, he believes, shows indubitable inherited resemblances between the personalities of siblings.

The Personal Tempo and its Inheritance. By I. Frischeisen-Köhler.—By personal tempo the author means an individual's characteristic speed of mental and bodily activities. This was measured in a large number of individuals by means of a tapping and a metronome test. The author fails to note, what other investigators (including the reviewer) have established, that personal tempo is by no means consistent in all activities—in other words, that people may be naturally slow at some things and fast at others. But although the results were derived from such limited tests, they are of interest in that they throw some light on the inheritance of a *normal* psychological characteristic. Measurements were obtained from mono- and dizygotic twins, from siblings and unrelated persons, and from parents and their children. The resemblances found within these groups appear to confirm the notion that personal tempo is an inherited trait.

This issue also contains further contributions to a symposium on experimental methods in psychology, by H. Prinzhorn, G. W. Allport and A. Adler. Prinzhorn criticizes experiment because it attempts to apply the quantitative or objectively controlled methods of physics to psychological processes which are essentially qualitative. Allport admits that such strictures hold good of much of the experimental work that has been carried out on personality. But he gives many instances of more suitable methods of approach which, while conforming to controlled experimental conditions, do not neglect the qualitative conception of personality as an organized structure of attitudes and traits. Adler's article is a short statement of his system of " individual " psychology, and seems to be irrelevant to the symposium.

September 1933, Vol. II, No. 1.—*Identical twins reared apart.* By R. Saudek.—A detailed case history is given of a pair of identical twins, first described by Professor Muller of Texas University in 1925. The two girls had been reared in very different environments, yet their scores on intelligence tests were practically identical. But on temperamental tests such as the Pressey X-O and the Downey Will-Temperament Tests, there was no more resemblance than between pairs of unrelated persons, and these differences are traced to their unlike upbringing and marital history. Dr. Saudek contributes an analysis of their handwriting which supplements and confirms very closely the results of the temperament tests and of estimates of their personality traits. He admits that graphological

methods are capable of less accuracy than tests where purely intellectual characteristics are concerned.

The Study of Heredity as applied to Psychic Properties. By O. v. Verschuer.—This article is a short survey of the chief methods (the study of families, or of mono- and dizygotic twins) which may be applied in investigating the influence of inheritance on various characteristics. It includes simple morphological characteristics such as polydactility, physiological properties such as blood grouping and hyperpiesia, abnormal psychological properties such as schizophrenia and epilepsy, and normal characteristics such as personal tempo, special talents, etc. The difficulties of isolating simple and accurately definable characteristics at these higher levels are pointed out.

An article by G. B. Watson, *Next Steps in Personality Measurement*, also bears on this last point. The author realizes the artificiality of contemporary objective tests and statistical investigations of personality traits, and of the doctrine, derived from such investigations, that temperament and personality consist of innumerable specific habits. He suggests that the subjective situation in testing, i.e. the motives and attitudes in the mind of the person who is tested, should be taken into account, not merely the external, objective conditions; and that a sound psychological theory of the organization of personality is an essential prerequisite to the development of successful methods of measurement in this field.

Though the reviewer shares these views of Professor Watson, he is unable to regard Heymans and Wiersma's classification of temperamental types as satisfactorily fulfilling these requirements. D. Wiersma's article, *On Pathological Lying*, is an unconvincing attempt to apply this classification to cases of normal lying and of pseudologia phantastica.

In the same issue are two interesting articles on animal psychology. S. Zuckerman describes Wiesner and Sheard's well-known work on maternal behaviour in the rat, also H. C. Bingham's recent field work on the habits of gorillas. R. W. G. Hingston outlines the theory of which he has recently published a full account in *The Meaning of Animal Colour and Adornment*. Though these articles, and that of v. Verschuer, are unoriginal, they are valuable in that they serve to bring otherwise rather obscure advances in psychology to the notice of the very wide audience to which this Journal appeals.

P. E. VERNON.

Human Biology

September 1933, Vol. V, No. 3.—C. C. Seltzer studies anthropometric data gathered by Stefansson in 1906-12. He follows Birket-Smith's chronological sequence of Eskimo cultures and discusses particularly the two last in the series, leaving the question of the *Proto* and *Palae Eskimo* almost untouched. The third or *Thule* culture identified with Steensby's *Neo-Eskimo* culture originated, he thinks, in Alaska, and spread eastwards to Greenland with special relation to whale hunting. The fourth or *Eschato-Eskimo* culture, or Central Eskimo culture, he thinks is a matter of relatively recent introduction into the Arctic.

The bearers of *Thule* culture, represented by the Mackenzie Eskimo are very dolichocephalic (mean C.I. 74-75) hypsicephalic and tall (mean 168·96 cm.). The *Eschato-Eskimo* culture was brought by a stock with American-Indian admixture, from the region of Lake Athabasca. One part of this stock was dolichomesocephalic with short narrow face; another part was mesocephalic with a fairly long and broad face. Stefansson contributes some critical introductory notes and emphasizes the amount of European admixture in Greenland.

C. Kirkpatrick and Grace Cederstrand discuss nature and nurture in relation to twins and brothers in *Who's Who*. They are rightly much concerned to emphasize that heredity and environment cannot be separated. They find that the chances of getting into *Who's Who* are nearly 1 in 3 if one's twin brother is listed. In the case of the pairs of brothers in the *Who's Who* sample, the average age difference was 7·3 years, and it is possible that men listed have brothers still too young to be so listed, but as a matter of fact the *Who's Who* sample of elder brothers has an average age of 61, though this does not help in discussion of the younger men in *Who's Who*, for these may have brothers coming on. The chances are 1 in 19·25 that a man in *Who's Who* has one or more brothers also listed. Having a brother in *Who's Who* appears to give one a 1 in 13·3 chance of inclusion in that list, which includes 1 in 507·5 of the general male population over 45.

A. H. Schultz discusses the growth and morphology of Gibbons and Siamangs, supplying valued data in general accord with established views. Franz Boas continues his studies of human growth which suggest that growth of Hebrew children is ahead of that of non-Hebrews until 13 among boys and until 10 among girls. The permanent dentition of the poor, who are shorter in stature than the prosperous classes, proceeds more rapidly, save as regards the incisors.

H. S. Diehl writes on heights and weights of American College Men. Students are taller and heavier than Army recruits, insurance applicants, etc., at every age, and the students at Princeton, Yale and Stanford more so than those at the State Universities.

T. Kemp finds that if one parent carries the factor for goitre, very frequently all the daughters suffer from it.

R. Pearl attempts a classification and code of occupations of considerable interest for sociological work. W. Gafafer gives an account of Kenelm Digby and his psychotherapy.

H. J. FLEURE.

Journal of Criminal Law and Criminology

July-August 1933, Vol. XXIV, No. 2.—*Institutions for Defective Delinquents.* By Louis N. Robinson.—The Institution for Defective Delinquents at Napanoch, New York, opened in 1911, was the first attempt in the United States to segregate completely male prisoners who were not insane and yet could not be classed as mentally normal. Defective delinquent women had been provided in 1920 with accommodation in a section of the New York State Reformatory for Women, and in 1931 the Albion State Training School was appropriated for this group. In 1932 the establishment of an institution, supplementary to Napanoch was authorized. The type of offender who may be committed as a mental defective in the State of New York is a mental defective over 16 years of age, convicted of a criminal offence.

Legislation in Massachusetts first recognized defective delinquents as a separate class in 1911. In 1922 a department for men was established at the State Farm, Bridgewater, and a department for women was opened there in 1926. In 1928 the law was amended to allow commitment as a defective delinquent of a first offender if the court considered the individual had a tendency to recidivism of a serious type. Unlike the New York law, the legal definition made no mention of any age limit. Administrative policy at first limited commitments to cases over 18 and under 25 years, and although this ruling has since been relaxed, over half the defective delinquents newly admitted each year at the State Farm are as a rule in the 14 to 20 year age group. The suggestion is made that relatively few offences are committed by defective delinquents of middle age in Massachusetts, as such persons apparently die or get comfortably ensconced in an institution of one kind or another. But may not some of the higher grade cases become socially acceptable after a period of adolescent instability is passed or when contributory psychological maladjustments are removed?

New Jersey has as yet no specialised institution for defective delinquents, but those conversant with the problem have come to the final conclusion that the treatment facilities for the psychopathic delinquent, and the special training facilities for the feeble-minded delinquent, ought to be provided in a separate institution for the defective delinquents of both classes, where treatment, training, and correction could all be provided under one institutional roof.

The Federal Government is now building at Springfield, Missouri, a new institution which it calls a " hospital for defective delinquents." The hospital is designed for federal prisoners who are suffering from tuberculosis and other chronic degenerative diseases, for those who are insane, and for those who are psychopathic. The feeble-minded as such are not included in the prospective types of cases to be admitted. But it remains to be seen how many cases will obtain admission because of the psychopathic symptoms they display, and how many purely subnormal cases will be transferred because of physical ailments.

Pennsylvania is considering the establishment of an institution similar to Napanoch, and other States are beginning to take up the matter.

The author stresses the importance of a very careful definition of the term defective delinquent, so that there may be no doubt in regard to the type of offender to be committed to an institution. He considers that the following types might conceivably be included: intelligent but psychopathic; of subnormal intelligence but not psychopathic; subnormal and psychopathic; extremely subnormal, i.e. with very low grade intelligence. He appears to be doubtful whether the first group should be included. New York and Massachusetts say no; New Jersey, yes. The second and third groups are certain to be included. The author considers the fourth group should be excluded, since such individuals belong to custodial institutions for the feeble-minded.

Among other matters considered by the author are the type of institution required, its function and place in the State Administrative Scheme, and the methods of discharge.

W. Norwood East.

Journal of Genetics

August 1933, Vol. XXVII, No. 3.—*The Genetic Basis of Amaurotic Family Idiocy.* By David Slome, M.A., Ph.D., M.B., Ch.B.—The author reviews the recorded cases of the infantile forms of this condition, and shows that the proportion of affected children closely approaches expectation calculated on the basis of a single recessive factor. The relatively high proportion of consanguineous marriages negatives the possibility that two complementary dominant factors are involved. The proportion of consanguineous marriages is of the order of magnitude that would be expected if one and the same factor were always responsible. The condition is much commoner amongst Jews than amongst non-Jews, and in harmony with this fact it is found that the consanguinity rate is much higher amongst the latter. It is interesting to note that the condition is very constant in its manifestations and in the age of onset and the age of death. It can be definitely distinguished from the juvenile form, also a recessive characteristic, by the differences in age of onset and of death, by the absence of racial predilection in the latter condition, and by the presence of a cherry-red spot in the macula on ophthalmoscopic examination.

A Note on the Inheritance of the Brindle Character in the Coloration of Irish Wolfhounds. By F. Fraser Darling and Phyllis Gardner.—Evidence is presented to show that in this breed there is a

dominant factor for brindle pattern. This finding is in harmony with that of Little and Jones in some breeds of hounds and with that of Wriedt in Telemark cattle. Another form of brindling is found in British cattle which depends upon black, red and dun factors in the heterozygous state.

The Limits of Applicability of Correlation Technique in Human Genetics. By Lancelot Hogben.—Previous investigations, mainly by Fisher, have demonstrated that if correlations between relations are known and if it is assumed that in the population under review each genotype has an equal chance of experiencing, with their respective probabilities, each of the available kinds of environment, it is possible to estimate the relative contributions of nature and nurture. The author considers that in viviparous animals and more particularly in man the distribution of gene differences and that of differences due to environment are so closely related that this criterion is not sufficiently realized for useful estimates to be made. Further, it is contended that observations on a population under existing conditions cannot be used in order to set limits to the change that might be effected by alterations in environment. These points are illustrated by examples taken from laboratory experiments.

Correlation Between White Coat Colour, Blue Eyes, and Deafness in Cats. By Ruth C. Bamber (Mrs. Bisbee), M.Sc., F.L.S.—It has long been known that blue-eyed white cats are often deaf, and it has frequently been claimed that the association is an invariable one. A cat of this type is described that had normal hearing, and also a white cat with one blue eye and one yellow one, which was deaf in both ears. An albino cat had normal hearing. It is concluded that dominant white colour, blue eyes, and deafness are closely associated physiologically, but that the association shows some variability.

October 1933, Vol. 28, Part 1.—*A Lethal in the Rat.* By F. A. E. Crew and S. K. Kon.—This paper gives a description of the first lethal factor to be found in the rat. It behaves as a simple recessive. The affected individuals appear normal until the second week of lactation, when they commence to lose weight. Death occurs in about five days, in a state of inanition. The primary cause of death has not been discovered. There is a general discussion on the classification of lethal factors.

J. A. Fraser Roberts.

Physiological Zoology

July, 1933, Vol. VI, No. 3.—*Induced Sterility.* By M. F. Guyer and P. E. Claus.—Ten years ago Guyer showed that the blood serum of a rabbit injected intravenously without its own spermatozoa is toxic to the spermatozoa of all rabbits including its own. Subsequently McCartney showed that female rats may be sterilised temporarily by the injection of spermatozoa, other tissues and cellular suspensions being ineffective. More recently Pommerenke found that the toxic substance produced by sperm injections into females (rabbits) is present in the vaginal secretion. He was able to sterilise his animals for a period of from six to twenty-five weeks. In the newest publication from Guyer's laboratory the mechanism of sterilisation has been explored further. The most arresting results are, first, that injection of an emulsion of ox spermatozoa induced temporary sterility (in a few cases permanent) in the female rat; and second, that the same result can be obtained by the use of pure nucleo-proteins. The discovery that spermatoxic sterility is not restricted within narrow species limits may well prove to be an important contribution to contraceptive practice. The authors also report permanent or temporary sterility resulting from the injection of pituitary extracts (anterior lobe) into female rats. The mechanism of this effect has not yet been elucidated.

L. T. H.

CORRESPONDENCE

Sterilization: Voluntary or Compulsory?

To the Editor, Eugenics Review

SIR,—From one or two pamphlets issued by the Eugenics Society relating to sterilization, as well as from references to the subject in the EUGENICS REVIEW, it appears that the approval and support of the Society is generally limited to the voluntary application of one of the most effective methods of diminishing the biological off-scourings which threaten the English race with downfall. Does not one detect here an example of the moral cowardice of refusing to face logical issues for fear of offending personal susceptibilities and prejudices, and the spirit of compromise too often belauded by Napoleon's "nation of shopkeepers?"

The whole object of eugenic teaching is race improvement, and obviously the interests of individuals, particularly of those in general harmful or useless to their race, must be subservient to the interests of their race as a whole and its future generations. The living must make unselfish sacrifice for the unborn, and this involves a discrimination in parentage against those of unsound or undesirable stock.

It is precisely these inferior stocks as a whole who are the least endowed with the requisite intelligence and sense of duty to others to offer themselves for sterilization. Hence it seems clear that any effective scheme must be compulsory and inclusive of everyone falling within certain categories. There will be border-line cases, of course, difficult of assessment, and "innocents," but a good Act of Parliament, like an act of God, does not complicate its practical operation by discriminating too finely.

In the light of present knowledge the crux of this problem of sterilization in Britain to-day is not the organization and the determination of the limits of its application in practice, but the lack of a system of government which permits control of the national interests by the Nation's best, i.e. by unselfish intelligent men with the guts to act as their intelligence directs them. For this the country must wait for a Fascist-Eugenic régime.

Paris. NORMAN A. THOMPSON.

PUBLICATIONS RECEIVED

A Gyermek. Vol. XXV. Nos. 6-7. 1933.

Asthma Research Council. *Report of progress for the year ended 31st October, 1933, and statement of Income and Expenditure for the Year ended 31st December, 1932*. Asthma Research Council, c/o King's College, Strand, W.C.2. Gratis copies from the Secretary.

Birkenfeld, Gunther. *A Room in Berlin*. London, 1933. Constable. Pp. 217. Price 3s. 6d.

H.M. Government. *Births, Deaths and Marriages and Cases of certain Specified Infectious Diseases, Quarterly Return, September, 1933*. London, 1933. H.M. Stationery Office. Pp. vii + 17. Price 9d.

Bradlaugh and To-day: Speeches delivered at the Centenary Celebration and at the Commemoration Dinner. London, 1933. C. A. Watts & Co., Ltd. Pp. 122. Price, Cloth 1s. 6d., Paper 6d.

Bulletin of the Central Information Bureau for Educational Films. Vol. I, No. 1. (New Series). November, 1933. Price 1s.

Charakter, No. 3. 1933.

Crawford, O. G. S. *Historical Cycles*. (Reprint from *The Smithsonian Report for 1932*, pages 445-459.)

Cox, Gladys M., M.B., B.Sc., *Clinical Contraception*. London, 1933, William Heineman. Pp. ix + 173. Price 7s. 6d.

Doll, Edgar A., Ph.D. *Birth Lesion as a Category of Mental Deficiency*. (Reprint from *The American Journal of Orthopsychiatry*. Vol. III, No. 1, January, 1933.) Pp. 13.

Doll, Edgar A., Ph.D. *Special Education as a Department of School Administration*. (Reprint from *The Journal of Educational Research*, December 1932.)

Eugenics. No. 117. Publishers Yuseig (Hyogo).

Fegiz, Prof. P. Luzzatto. *La Dinamica Delle Popolarioni*. Trieste, 1933. Tipografia del Partito Nazionale Fascista. Pp. 23.

Freud, Sigmund. *New Introductory Lectures on Psycho-Analysis*. London, 1933. Hogarth Press. Pp. xiii + 240. Price 10s. 6d.

Futcher, Palmer Howard. *Giants and Dwarfs: A Study of the Anterior Lobe of the Hypophipia*. Cambridge Press, 1933. Harvard University Press. Pp. 80. Price 6s.

Hall, Gladys Mary, M.A. *Prostitution: A Survey and a Challenge*. Introduction by Charles E. Raven, D.D. London, 1933. Williams & Norgate, Ltd. Pp. 196. Price 7s. 6d.

Howard Journal, The. Vol. III, No. 4.

Hoyer, Niels. *Man into Woman*. (Translated from the German by H. J. Stenning, Introduction by Norman Haire.) London, 1933. Jarrolds. Pp. xiii + 287.

The Intelligence of Scottish Children, A National Survey of an Age-Group. London, 1933. University of London. Pp. x + 160. Price 5s.

The Journal of Juvenile Research. Vol. XVII, Nos. 3 and 4. July-October, 1933. California Bureau of Juvenile Research, Claremont, California, U.S.A.

Keller, Lewis. *Report on the Activities of the Stephania National Association for 1932*. Stephania National Association for the Protection of Mothers and Infants, Budapest, 1933.

King, Boswell. *Sex and Human Nature*. 1933. George H. Wales Publishing Co. Pp. 304. Price 15s.

Knowles, W. P. *Jim McWhirter*. London, 1933. The C. W. Daniel Co. Pp. 282. Price 7s. 6d.

Kreezer, George, Ph.D. *Neuromuscular Excitability in the Mentally Deficient*. (Reprint from *The Proceedings and Addresses of the Fifty-Seventh Annual Session of the American Association of Mental Deficiency, held at Boston, Mass., May 29-June 3, 1933*.)

Mühlmann, W. E. *Ausleseprozesse in der Menschlichen Gesellschaft*. (Reprint from *Bremer Beiträge zur Naturwissenschaft*.)

Mühlmann, W. E. (*a*) *Die Hitler-Bewegung*. (*b*) *Rassenfragen im Schrifttum der Gegenwart*. (Reprints from *Sociologus*, Vol. 9, Nos. 2-3. June and September, 1933.)

McLachlan, David Blair. *Is there a Universe? The Negative Argument*. London, 1933. Golden Vista Press. Pp. ix + 94. Price 2s. 6d.

Mother and Child (Formerly *National Health*). Vol. IV. No. 9. December, 1933.

National Bureau of Economic Research, Bulletin 48. October 31st, 1933.

New Health (*Health and Home*). November, 1933. 6d.

Osborn, Frederick. *Characteristics and Differential Fertility of American Population Groups*. (Reprint from *Social Forces* Vol. XII. No. 1. p. 8. October, 1933.)

Orton, J. Louis. *Hypnotism—The Friend of Man*. London, 1933. Thorsons. Pp. 280. Price 5s.

Pearl, Raymond. *Constitution and Health*. London, 1933. Kegan Paul. Pp. 97. Price 2s. 6d.

Reports of the Institute for Science of Labour. Nos. 15, 16, 17 and 18. Kurasiki, Japan, 1933. Price Y.0.40.

Schwesinger, Gladys C. *Heredity and Environment. Studies in the Genesis of Psychological Characteristics*. Edited by Frederick Osborn. New York, 1933. The Macmillan Co. Pp. viii + 484. Price $4.00.

Stephen, Karin. *Psychoanalysis and Medicine, a study of the Wish to Fall Ill*. London, 1933. Cambridge University Press. Pp. 238. Price 8s. 6d.

Uganda Protectorate. *Census Returns, 1931*. Uganda, 1933. Government Printer. Pp. 108. Price 5s.

Zuckerman, S., M.A., D.Sc., M.R.C.S. *Functional Affinities of Man, Monkeys, and Apes*. London, 1933. Kegan Paul. Pp. xviii + 203. Price 10s. 6d.

LIST OF EXCHANGES

American Journal of Physical Anthropology. The Wistar Institute, Philadelphia, U.S.A.

Animal Breeding Abstracts. Imperial Bureau of Animal Genetics, King's Buildings, Edinburgh.

Annals of Eugenics. Galton Laboratory, Cambridge University Press.

Archiv der Julius Klaus-Stiftung. Art Institut Orell Fussli, Zurich, Switzerland.

Bibliographia Genetica. Martinus Nijhoff, Lange Voorhout 9, The Hague, Holland.

Biometrika. Biometric Laboratory, University College, London, W.C.1.

Birth Control News. 108 Whitfield Street, Tottenham Court Road, London, W.1.

Birth Control Review. 104 Fifth Avenue, New York, U.S.A.

British Journal of Inebriety. 19 Park Crescent, Portland Place, W.1.

British Journal of Psychology, The. 52 Upper Bedford Place, W.C.1.

Bulletin de la Société d'Etude des formes humaines. Librairie Legrand, 93 Boulevard St. Germain Paris, France.

Bulletin de la Statistique Générale de la France. C/o le Directeur de la Statistique de la France, 97 Quai d'Orsay, Paris, VIIe, France.

Bulletin of British Library of Political Science. London School of Economics, Houghton Street, W.C.2.

Character and Personality. Allen & Unwin, 40 Museum Street, W.C.1.

Charity Organisation Quarterly. 296 Vauxhall Bridge Road, S.W.1.

Committee on Maternal Health. Academy of Medicine Building, Fifth Avenue and 103rd Street, New York City.

Countryman, The. Idbury, Kingham, Oxford.

Czecho-Slovakia Eugenics Society. Karlovo nam c.21.III., Prague II.

Difesa Sociale. Istituto Italiano d'Igiene, Previdenze ed Assistenza Sociale, Via Marco Minghetti 17, Roma, Italy.

Economia. Palazzo Sciarra, Roma, Italy.

Economic Journal. 9 Adelphi Terrace, W.C.2.

Educational Research Bulletin. Bureau of Educational Research, Ohio State University, Ohio, U.S.A.

Eugenical News. Eugenics Record Office, Cold Spring Harbour, Long Island, U.S.A.

Family Endowment Chronicle. Family Endowment Society, 52 Romney Street, S.W.1.

Genealogists' Magazine. Chaucer House, Malet Place, W,C.1.
Genetica. Martinus Nijhoff, Lange Voorhout 9, The Hague, Holland.
Health and Empire. British Social Hygiene Council, Carteret House, Carteret Street, S.W.1.
Hereditas. K. Universitets-Biblioteket, Lund, Sweden.
Journal of Comparative Legislation. 1 Elm Court, Temple, E.C.4.
Journal of Delinquency, The. Journal of Juvenile Research, Claremont, California, U.S.A.
Journal of Genetics. Cambridge University Press, Fetter Lane, E.C.4.
Journal of Heredity, The. American Genetic Society, 1918 Harford Avenue, Baltimore, Maryland, U.S.A.
Journal of the American Institute of Criminal Law and Criminology. 31 West Lake Street, Chicago, U.S.A.
Journal of the Royal Sanitary Institute. 90 Buckingham Palace Road, S.W.1.
Journal of the Royal Statistical Society. 9 Adelphi Terrace, Strand, W.C.2.
Lancet, The. 1 Bedford Street, W.C.2.
Man. Royal Anthropological Institute, 52 Upper Bedford Place, W.C.2.
Medical Officer, The. 36 Whitefriars Street, E.C.4.
Mental Hygiene. National Committee for Mental Hygiene, 450 Seventh Avenue, New York City, U.S.A.
Mental Welfare. 24 Buckingham Palace Road, S.W.1.
Metron. c/o Professor Corrado Gini, Istituto di Statistica, 10 Via Terme di Diocleziane, Roma, Italy.
Nature. Macmillan & Co., St. Martin's Street, W.C.2.
New Generation, The. 17 and 19 Finsbury Street, E.C.2.
Ons Nageslacht. Laan Trivelli 21, Weltevreden, Java.
Physiological Abstracts. Lewis & Co., Gower Street, London, and W. S. Hunter, Esq., Clark University, Worcester, Mass., U.S.A.
Physiological Zoology. University of Chicago Press, 5750 Ellis Avenue, Chicago, Illinois, U.S.A.
Proceedings of the Royal Society of Victoria, N.S.W. Messrs. Ford & Sons, Drummond Street, Melbourne, Australia.
Quarterly Bulletin of the Health Organization of the League of Nations. Allen & Unwin, 40 Museum Street, W.C.1.
Quarterly Return of the Registrar-General. Somerset House, Strand, W.C.2.
Quarterly Review of Biology. Dr. Raymond Pearl, 1901 Madison Street East, Baltimore, U.S.A.
Resumptio Genetica. Martinus Nijhoff, Lange Voorhout 9, The Hague, Holland.
Revue Anthropologique. Librairie Emile Nourry, 108 Boulevard St. Germain, Paris.
Revue de l'Institut de Sociologie Solvay. Parc Leopold, Brussels.
Schweitzerische Medizin. Barro Schwabe and Co., Basle, Switzerland.
Shield, The. The Association for Moral and Social Hygiene, 2 & 4 Great Smith Street, S.W.1.
Social Forces. University of North Carolina Press. (English Agents, Ballière, Tindall & Cox, 8 Henrietta Street, W.C.2.)
Sociological Review. Leplay House, 35 Gordon Square, W.C.1.
Statistical Bulletin, the. Metropolitan Life Insurance Co., New York, U.S.A.
Training School Bulletin. The Training School, Vineland, New Jersey, U.S.A.
Zeitschrift für Rassenphysiologie. J. F. Lehmanns Verlag, Munich.